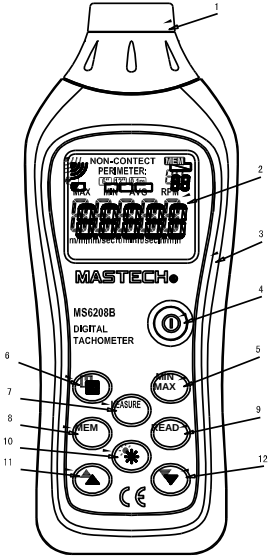
General Instructions

The MS6208B is a contact-type digital tachometer with stable performance, high reliability and high safety performance. The core component of the meter is a compact high-speed integrated chip. The meter calculates the exact rotation speed value through a reflected light sampling process. With a compact design, it is a meter with superior performance.

The meter will display rotation speeds from 50RPM---99999RPM. The LCD is backlit to allow making and reading measurements in low light conditions.

Panel Diagram (see front view)

1. Laser emission and receiving window
2. LCD display
3. Instrument case
4. Instrument power switch key
5. Maximum and minimum switch key
6. Hold key
7. Measurement key
8. Data storage key
9. Data storage read key
10. Backlight key
11. Storage read number plus key
12. Storage read number minus key



MS6208B Front View

Accessories

1. 1 MS6208B bare machine
2. 1 Operation Manual
3. 1 reflective sheeting
4. 4 x 1.5V AAA battery

OOBA (out of box audit)

When you get a new tachometer, check the meter and its accessories. If something is damaged or missing, please contact the store where you bought the meter to obtain missing items or to replace the meter.

Safety instructions

Operating environment:

- Elevation ＜2000 m
- Relative humidity (RH) ≦80%RH
- Operating temperature: 0 - 40℃

Warning

- To avoid damaging the meter or affecting measurement accuracy, do not open the meter.
- Do not use the meter in the places with high temperature and high humidity, or near flammable and explosive materials.
- Storage and maintenance: Do not use alcohol or

other solvents to clean the meter. If it is not used for long time, please remove batteries and put the meter in a dry and clean environment.

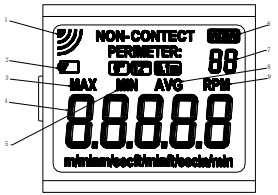
Symbols description

⚠Important safety information

Do not recycling

Low battery warning

CE The meter complies with CE safety standard



LCD Figure

LCD description

1. Signal symbol
2. Low battery symbol
3. Maximum measurement display
4. Rotation speed reading display
5. Minimum measurement display
6. Storage state display
7. Storage number display
8. Average measurement value display
9. Measurement unit display

Key Description

1. Switch key

Function: On/Off operation

Operation: When the meter is OFF, lightly touch switch key to turn on the meter. When the meter is ON, lightly touch switch key to turn off the meter.

2. Maximum and minimum key

Function: Switch maximum, minimum and average display value

Operation: When the LCD display is MAX, current measurement is at maximum. When the LCD display is MIN, current measurement is at minimum. When

the LCD display is AVG, current measurement is average value.

3. Hold key

Function: Hold the current state of the meter

Operation: When you press the key to hold, "H" will display on the upper right corner of LCD and the meter is HOLD state. Press HOLD key again to disable HOLD state, and the "H" on the upper right corner of LCD will disappear.

4. Measurement key

Function: Make laser tube illuminate for measurement

Operation: When turning on the meter, you can read the rotation speed of the object to be measured just by measuring according to operating instructions

5. Storage key

Function: Store current rotation speed value

Operation: When you want to store the current rotation speed value, press the storage key together with other keys, and you can store the current value to the specified storage number.

6. Read key

Function: Read the rotation speed value under the stored number

Operation: When you want to store the rotation speed value under a storage number, press the read key together with other keys, and you can read the rotation speed value under the stored number.

7. Backlight key

Function: Turn backlight on and off

Operation: Turn the backlight on when pressing the key the first time. Press the backlight key again to turn the backlight off.

8. Plus key

Function: Add storage number when reading or storing

Operation: When entering storage state, press plus key to add the current storage number

9. Minus key

Function: Subtract storage number when reading or storing

Operation: When entering storage state, press plus key to subtract the current storage number

Technical Parameters

I. General specifications

1. Rotation speed display is five-digit LCD number with maximum of 99999
2. Display 0 below 50 RPM
3. Measuring distance is 50mm--250mm (when the battery voltage is sufficient)
4. Display voltage lower than 4.5V when batteries are low
5. Dimension: 155mm*60mm*27
6. Weight: 120g
7. Power supply: 4 × 1.5V SIZEAAA battery
8. Auto off time is 30 sec

II. Technical parameter

Measuring scope	Resolution	Accuracy
50-99.99RPM	0.01RPM	±(0.03%±2d)
100-9999.9RPM	0.1RPM	
10000-99999	1RPM	

Measuring operation instructions

⚠Warning:

To avoid injury, don't aim at human eyes when measuring. Keep a safe distance from high-speed rotating objects to avoid machine damage or personal injury.

1. Paste reflective sheeting onto rotating disk or rotating shaft

To avoid inaccurate measurements, rotating disk or shaft can't be highly reflective. If rotating disk is strong light-emitting object, cover it with black material before attaching reflective sheeting.

2. Fix the tachometer in a stable position and ensure that the light emitted from the tachometer is perpendicular to the object to be measured.

3. Start the tachometer. Start the object to be

measured. After rotation speed is stable, press the measurement key and read the meter.

Note:

1. Because the meter measures and calculates the reflection time interval of light emitted from the meter, measurement is easily interfered with by extraneous light. Thus, measurement is not accurate if done outdoors in sunlight. Under such conditions, using the MS6208A contact-type tachometer is recommended.

2. If there is abnormal display due to vibrations or external light interference, release the key and press it again to reset the measurement reading to zero, and make measurements again.

Data storage and reading operation

I. Data storage operation

When you want to store rotation speed value, press

MEM key in the non-HOLD state. MEM and default storage number 00 will display on upper right corner of the LCD. Press plus or minus key to select storage number. At this time, if you pr. Press the backlight key, the rotation speed value will flash. The current rotation speed value can be stored in the selected storage number. Exit the storage state by pressing the READ key under the storage state.

II. Data reading operation

When you want to read stored values, press READ key in the non-HOLD state. The default storage number 00 will display on the upper right corner of LCD. Press plus or minus key to select storage number. At this time, if you press the backlight key, the rotation speed value will flash. Thus, you can read and display the value in the current storage number. It can exit the storage state by pressing the

MEM key in the storage state.

Battery installation or replacement

The power supply used by this meter is four 1.5V SIZE AAA batteries. To replace batteries, open battery cover, remove the old batteries, install new batteries of the correct size, according to the illustration on the cover. Close the battery cover after installation, and tighten screw before using the Meter.